

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
29 January 2004 (29.01.2004)

PCT

(10) International Publication Number  
**WO 2004/009169 A1**

(51) International Patent Classification<sup>7</sup>: **A61M 16/06**

(21) International Application Number: PCT/IL2003/000599

(22) International Filing Date: 22 July 2003 (22.07.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/397,042 22 July 2002 (22.07.2002) US

(71) Applicants (for all designated States except US): ZIN-  
DER, Oren [IL/IL]; 3/62 Haim Hazaz Street, 34996 Haifa  
(IL). TSAFRIR, Ouri [IL/IL]; 4B Bosmat Street, 73142  
Shoham (IL). SHOMRON, Ari [IL/IL]; P.O. Box 201,  
42920 Beyt Yzchak (IL).

(71) Applicant and  
(72) Inventor: MATARASSO, Hasdi [IL/IL]; 1A Amnon  
Ve'Tamar Street, Ramat Poleg, 42202 Netanya (IL).

(74) Agents: AGMON, Jonathan et al.; SOROKER - AG-  
MON, Advocates & Patent Attorneys, 12th floor, Levstein  
Tower, 23 Petach Tikva Road, 66184 Tel Aviv (IL).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,  
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,  
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

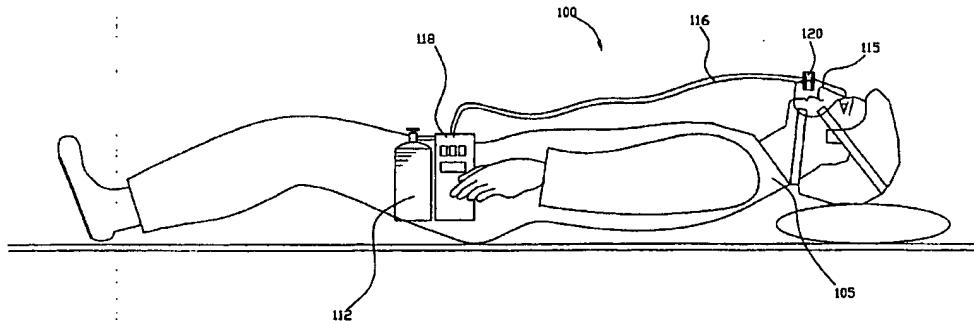
(84) Designated States (regional): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A RESPIRATORY AID APPARATUS AND METHOD



(57) Abstract: A system and method are disclosed for the provision of assisted breathing by the delivery of a controlled pressurized airflow to the pulmonary airway of a user with breathing disorders. The system comprises a source of compressed respiratory gas (112), a user interface unit (115) including at least one Venturi device (120) and a thin flexible tubing (116) connecting between the source of high pressure gas (112) and the Venturi device. The system and method provide a regulated and controlled flow of air to the user (105) in accordance with the user needs. The invention further discloses a novel small light-weight user interface for replacing prior art breathing masks.

WO 2004/009169 A1